WAR'S MANY CHANGES

Horseless Artillery, Motor Camp-Wagons, and Bicycles.

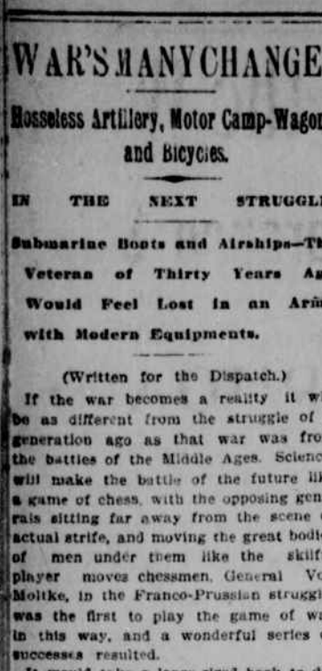
IN THE NEXT STRUGGLE.

Submarine Boats and Airships—The Veteran of Thirty Years Ago Would Feel Lost in an Army with Modern Equipments.

(Written for the Dispatch.)

If the war becomes a reality it will be as different from the struggle of a generation ago as that war was from the battles of the Middle Ages. Science, will make the battle of the future like a game of chess, with the opposing generals sitting far away from the scene of actual strife, and moving the great bodies of men under them like the skilful player moves chessmen. General Von Moltke, in the Franco-Prussian struggle, was the first to play the game of war in this way, and a wonderful series of successes resulted.

It would take a large-sized book to describe the many unique appliances which will be used in the next war. In the first place, there is the bicycle, and right here it should be stated that the bicycle



REGULAR-ARMY 'CYCLER.

within the past year or two has been recognized the world over by the great military generals and strategists as of supreme importance in time of war. The United States Military Wheelmen, representing State militia and regular-army soldiers and officers the country over, is an organization that has been in existence some time. At its first national convention Major-General Nelson A. Miles, head of the United States army, said this of the bicycle:

"We have seen enough to convince many men that it will be one of the most useful appliances in war. I have heard it said that you cannot manoeuvre large bodies of men on bicycles. I have heard men make that statement, but there are some men who couldn't manoeuvre large bodies of men on horse, foot, bicycle, or any other way. Bicycles can be used by men who believe in the bicycle; who have confidence in it, and know that it can be used for war purposes. It can be used in some places where a horse cannot be used. The horse can be used in some places where the bicycle cannot be used. You cannot swim a river on a bicycle. But you can conceal it there for several days, fish it up, and ride away, which you cannot do with a horse. There are many uses and means to which you can apply a bicycle where you cannot use a horse, and where a man cannot perform the same service on foot I think your association to be a commendable one. I do not think it will lessen your interest in the National Guard more than similar private associations of military men have lessened their interest in the service."

WILL PERMIT OF LONG MARCHES.

In many of the States there are bicycle regiments and companies; there are bicycle companies in the regular army, and it is only a question of short time when bicycles will become general in all military evolutions. When these are in use, marches of 100 miles or more will be made in the light of one day. Forced ones of double length will easily be made in twenty-four hours. The bicycle need but little oil, and is always ready.

It is also apparent to progressive military men that with the advent of the bicycle must come the advent of the horseless carriage in the army provision train.

Another important bearing of the compact road-motor upon modern warfare will be the possibility of hauling field cannon without the aid of horses. The field-piece is the clumsiest of all instruments of warfare to manage during a retreat. For this reason alone cannon are so often deserted in the field to fall into the hands of the enemy.

When good roads make the horseless conveyance popular, we will have to propel our cannon at a rapid rate, on the march, to keep up with the rapid pace of the bicycle cavalry and infantry, and the provision-wagons, propelled by the storage-battery, naphtha, gasoline, petroleum, and other motors.

MOVEABLE FORTS, TOO.

It looks as if the army-mule was doomed to pass away like the car-horse. Not only will the army-wagon and the gun-carriage be propelled by their own force, but great moveable fortresses will be brought into use. These will be armored like the new warships, and tenanted by a score or two of sharp-shooters and rapid-fire guns. They will readily be moved from place to place, and be practically impregnable.

A travelling fort could not be destroyed nearly so quickly as a warship, for the reason that there is no water to rush into the former. A hundred holes can be shot clear through it, and yet it will go on unless the vital machinery be broken.

The submarine torpedo-boat will also come into play. Naval scientists have been working on this problem for years, and it is believed that each one of the great nations has a submarine boat capable of doing efficient work. Such a possession would be treasured as a secret of great value, and every possible means adopted to prevent other nations from learning the details of its construction.

The fact that M. Goubet, a French inventor, has, after four years of work, completed a submarine boat which has been satisfactorily tested, is proof that this deadly vessel will figure in the next war.

The qualities which distinguish a submarine vessel, and without which it would be useless, are habitableness, security, rapidity of immersion and emergence, stability, immobility at a given depth, a ready response to the rudder, and the possibility of the crew being able to manoeuvre from the interior of the boat.

For the first necessity, and, in fact, the most essential of all—viz., habitableness—the crew of the Goubet is provided with air by means of compressed oxygen, which is carried on the vessel in steel tubes, exhausted under a normal pressure. In these conditions a crew composed of three men could exist in the interior of a submerged vessel for eight hours at least, and if necessary for fifteen hours, without suffering any inconvenience resulting from foul or rarefied air.

SAFETY ASSURED.

Its safety has been assured by extra ballast. Should an unforeseen accident occur to the machinery the ballast thrown overboard would right the boat, and it would rise to the surface like a piece of cork. The weight of the Goubet is so calculated that, armed, loaded, and carrying its crew, it will easily float, leaving but a small portion of its upper shell and its air-tight dome visible, which latter is used as a lookout as it glides through the water.

To submerge the boat it is sufficient to augment its density, and the boat is furnished with interior reservoirs for this purpose. A certain amount of water is introduced by means of a suction and force-pump, and this quantity can be augmented or diminished at will. To sink the boat, the suction-pump draws in enough water for the purpose; while to bring the boat to the surface the force-pump is put in requisition. The Goubet can sink or rise in a vertical position.

The principal obstacle so far to the propelling of a submarine vessel has been its want of stability. In fact, the equilibrium of a boat once sunk has always seemed to be at the mercy of the lightest displacement in its interior. Should the ballast slip to the bow or stern, the boat is apt to take a more or less marked inclination, which makes it impossible for a man to remain in it with safety. Owing to its mechanical construction, the Goubet rises or descends without inclining to the bow or stern, and its oscillations never displace its horizontal position more than five or six centimetres.

The motive-power given to the Goubet is furnished by Schauschiff's electric-battery. A small amount of power only is needed when the boat is completely submerged. The whole secret of managing the Goubet lies in the variations of its specific weight; once submerged its weight is almost exactly equal to the weight of the volume of water which it displaces—that is to say, its weight is nothing. It acts in the water as a piece of cotton acts in the air, tossed here and there at the mercy of the slightest impulsion. This explains why, with one or two-horse power, a swiftness of seven or eight knots may be given to this mass of bronze, whose weight surpasses ten tons. This is also why, in coming in contact with an obstacle, it rebounds like a rubber ball, and does not lose its shape.

Two torpedoes are fastened under the copper wings which are attached to the hull. These torpedoes can be discharged by a very clever contrivance by the person seated in the interior. It is also proposed to attach a steel rod to the vessel, working a pair of large shears with which to cut the wires of the enemy's torpedoes.

In shape the Goubet is round in the

RAPID-FIRE GUN.

middle, and conical at both ends. It is lighted interiorly by a number of portholes in the hull, which are airtight, by means of panes of heavy glass, thirty millimetres in thickness. As it weighs but ten tons, it can easily be transported on a railroad-truck or between-decks of a man-of-war or packet-boat.

RAPID-FIRE GUNS.

An idea of the deadly powers of one of the new rapid-fire guns can be gained from the fact that the new Hotchkiss machine-gun fires ten shots a second, or 600 shots a minute, or 36,000 shots an hour.

Unlike most other machine-guns, this new weapon has but one barrel, and all the bullets pass through it, and all the explosions take place in the same powder-chamber. At first thought it would seem impossible to operate such a gun without causing the chamber and barrel to heat in a very short time to such a degree as to render further firing impossible, but this trouble has been overcome by an ingenious yet extremely simple arrangement, the essential features of which are that the barrel is permanently fixed in the breach, and that none of the moving parts is subjected to the heat developed by the power gas.

In France the gun has been fired rapidly for three hours, during which time 100,000 cartridges were discharged, without any inconvenience because of expanded parts.

The total weight of a gun that will fire 8-calibre cartridges is twenty pounds. It can be mounted on any type of naval or military carriage, or on a tripod like that shown in the cut for use by cavalry.

One man can handle it readily, but the services of another is required to supply ammunition.

The mechanism of the piece is extremely simple. Exclusive of the sights, but including barrel, shoulder-piece, etc., there are only thirty-eight separate parts and only four springs—the main spring, the sear spring, the extractor, and the pawl spring. All the parts are made to fit together without the use of screws, and no tools are necessary to completely dismount or to assemble the gun except-ing a small monkey-wrench.

It can readily be seen by this that one man at a gun of this kind could annihilate in a few minutes a regiment armed with the weapons of thirty years ago.

SHARPSHOOTER'S IMPORTANCE.

With the improvement in ammunitions and rifles the sharpshooter would figure most prominently in the next war, and it is satisfactory to know that Uncle Sam's marksmen are the finest in the world. The 25,000 soldiers in the regular army have just been furnished with the new calibre rifle made at the national factory at Springfield. It is effective at a distance of a mile, and the lead bullet, clad in a steel coat, leaves the muzzle at a speed of nearly [illegible] a mile a second. The idea of the [illegible]ate rifle is to throw a small and ve[illegible]d projectile with enormously-increa[illegible]elocity to a much greater distance with greater precision than formerly.

Just here comes in an odd point. The weapon is an improvement in the direction of humanity. The bullet travels so fast that apparently the body does not attempt to resist it, and it passes through the flesh or bone without inflicting much shock, making a small, clean hole, and not breaking up the tissues. It goes through the thinner bones—as the shoulder-blades, the ribs, and breast-bone—without smashing effect. An opportunity for a first rate test was afforded by the recent Chitral campaign in India. Wounded natives, with tiny holes drilled clear through them, were out and about within twenty four hours, not suffering any serious inconvenience. Such was actually the case with a majority of the Swatis, who were hurt in various engagements. This might be understood more easily if only the flesh had been injured, but bones were perforated, and yet the men were not disabled.

Sharp-shooters, armed with the modern style of rifle, will play a great part in future warfare. The discharge of the new weapon is almost noiseless, and smokeless powder being used, there will be nothing to betray the location of a concealed rifleman who pours a continuous fire with murderous accuracy into the ranks of the enemy. The commander in the field will see his officers and men fall around him without knowing whence the blow is struck. Two or three skilful marksmen will be able to pick off every man at a battery of artillery, so as to render the guns of no use. The new rifle fires five shots from the magazine as fast as the trigger can be pulled, and as quick as a wing another set of five cartridges is substituted for the empty shells. The cartridges are fastened together in sets of five, with paper strips.

BALLOONS AND AIR-SHIPS.

The balloon will also figure in the next war, and, perhaps, air-ships. France has an air-ship which is carefully guarded. No one is allowed to see it, and no drawings have been made of it. It is said to be a cigar-shaped envelope, within which is the gas and a small bag, which is to be pumped full of air. An electric-motor drives in the rear a screw propeller. It is said that the air-ship is able to make a speed of at least 25 miles an hour.

Uncle Sam has just completed the building of a big balloon near Denver, capable of carrying several officers and fitted with telegraph and telephone-machines. A drag-rope will always connect the balloon with the ground, and, by means of the wires, the officers in the air will communicate with those below.

In conjunction with the balloon, bicycles are to be used, and on a coil of the wheel the wire is run and paid out as the machine progresses. Thus, when the balloon has started up, the officer on the wheel races for the tent of the general, and the telephone wire is carried along and let out till the tent is reached. This wire makes direct communication between the officers on the field and the man in the air, who, from his station, has a complete view of the enemy, and can thus give important information to his superiors.

Germany has an army of trained bloodhounds for use in event of war. They carry ammunition and dispatches, and are taught to seek the wounded after a battle. The ancients used fierce dogs in their wars, and they invariably terrorized the opposing troops. It is not probable that Uncle Sam will make use of dogs in event of war, as their efficiency is regarded with much doubt.

Our Old Home.

(Written for the Dispatch.)

Blest home, once ours, how oft again
In memory's vivid dreams
I see its gardens in their bloom;
Its woodlands and its streams.

The tapering poplars stately stand
O'er casements fair and tall,
And on the quaint and moss-flecked roof
Their shimmering shadows fall.

And still past years their garlands fling
O'er scenes of joys untold,
Though wings of hope in golden sheen
No more their tents unfold.

How like a Titan's silvered shield
The sunlit waters seem,
And as the white waves clasp the waves
How bright new diamonds gleam!

With Eden's birth these wild waves heir
The light of sun and star,
And their weird [illegible]ody has swept
The aeons long [illegible]ar.

And e'er since mirroring in their sheen
The young day's Orient flush,
They've welcomed from her ocean couch
The morning's roseate blush.

The south winds sweep the meadow grass
And daisies wake from sleep,
And bluebells murmur chimes like those
The elfin measures keep.

And wandering where the sunbeams lure
The jessamine springs to life,
And lifts aloft the golden bloom,
With soul of fragrance ripe.

As on Alhambra's pennon proud
Pomegranite blossoms glow,
And 'gainst the green of English box
Their ruby radiance throw.

Aflame the scarlet poppies gleam
Along the river's brink,
And draping root and tree and shrub
The woodbine tendrils link.

Now spinning through the fragrant wreaths
The shining hum-bird dips
And from each rosy dew-brimmed cup
Wine rich as Xeres' sips.

Above them all night's shuttle weaves
The moonlight's tissue pale,
And o'er the soft enchanting scene
Fair falls the silvery veil.

I list—a sweet, wild minstrelsy
From mocking-bird afloat—
And with it—in its pathos deep—
The whippoorwill's sad note.

Now Autumn comes in Tyrian robes,
While frost on heather gleams,
Her banners flushing earth and sky
With gold and crimson beams.

Upon the old Colonial hearth
The ruddy embers glow,
And 'round the sofa quaint and carved
Soft footsteps come and go.

Oh! echoing through these visions fair
I hear their steps who walked in white,
Holy whisperings fill the air,
'Mid shimmering robes of light;

And white-browed loved ones sleeping there,
From that dear house shall rise
Upon the resurrection morn
For mansions in the skies;

And first amid the loud acclaim
A mother's song shall ring;
The children Thou hast given me
In Christ's dear name I bring.

N. O. D.

"The Melancholy Days Have Come, the saddest of the year," not when autumn has arrived, as Poet Bryant intimates, but when a fellow gets bilious. The "sere and yellow leaf" is in his complexion if not in the foliage at that inauspicious time. Hostetter's Stomach Bitters will soon discipline his rebellious liver and regulate his bowels, besides toning his stomach and healthfully stimulating his kidneys. Malaria, rheumatism, and nervousness are also relieved by the Bitters.

PLAY GAMES OF WAR

Odd Work in the Newport Naval College.

GIVES VALUABLE EXPERIENCE.

All Problems During the Past Year Were Based on the Presumption That England Had Declared War.

(Written for the Dispatch.)

Should war actually be declared between the United States and Great Britain, this country will not be in the helpless condition which foreign and domestic croakers have pictured it. Within the past week some sneering German military authorities declared that the United States are where Germany was in the seventeenth century, as far as the fighting strength of its army and navy is concerned. The absurdity of this statement is so apparent that it needs no further comment, but it illustrates in an exaggerated way the foreign idea of Uncle Sam's ability, or inability, to take care of his interests.

Very little is known, outside of military and naval circles, of an institution which would prove a most important factor to the United States should the war [illegible]. This is the Naval War

THE WAR COLLEGE.

College, at Newport, R. I., and all of the work done by it since its inception has been based on the exact lines which the present emergency contains. In other words, all the study has been concentrated upon the possibility of a war with Great Britain.

The students at the college are the regular officers of the navy, and the 1895 class includes men of all ranks, from the very young ensign to the very old captain and commander. The course of study is unique, and quite unlike that followed in any governmental institution the world over. Short-sighted officers at Washington have time and time again questioned the utility of the institution, regarding it as a needless expense of public money, but the present emergency shows the fallacy of their complaints.

Captain H. C. Taylor, of the navy, is the president of the college, and he maps out the problems which the students solve, and it requires an abundance of theoretical and practical knowledge to accurately solve them.

It is generally supposed that when a man graduates at Annapolis he has had all the schooling necessary to make of him a good and efficient officer. There are many reasons which disprove this. In the first place, the nation has been at peace for thirty years, and there are gray heads in the service who have never seen a bit of actual war. During that period there has been little squadron service. Ships more and more have cruised singly. Naturally, naval officers have insensibly lost sight of the ever-pressing need of tactics, strategy, and other branches of the great art of war.

Last year, 1895, was the most successful in the history of the college. Below is given the hardest problem which the 1895 class had to solve. It was given out last spring on the supposition that Great Britain had declared war against the United States, and that the British force would make a combined naval attack on the New England coast supplemented by a strong body of troops from Halifax. Here is the problem as originally stated:

May 10.—War is imminent. The enemy is assembling in Halifax. He is expected to descend upon the New England coast. His probable plan is to occupy the coast and chief cities from Portland to Boston, thereby seconding certain movements of his land forces. His success depends upon his completing this occupation before June 10th, maintaining it until July 10th. The [illegible] destined for this purpose is one of [illegible]ore fleets, whose total strength is three [illegible]mes that of our fleet, and 20,000 men in fifty transports.

Our available force is ordered to assemble for the present in Nantucket Sound.

May 20.—War is declared. The fleet leaves Halifax, occupies Provincetown and blockades Boston May 23d. Is composed of six battleships, eight armored cruisers, eighteen cruisers, twelve gunboats, and twelve torpedo boats. Gains and keeps touch of our fleet, wherever it may be, by means of scouts.

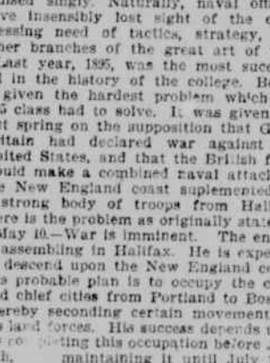
Our force is five battleships, five armored cruisers, fifteen cruisers, ten gunboats, ten torpedo-boats, and one ram. A heavy monitor at Boston, a light one at Portsmouth, and another at Portland are to be retained at those points. We learn that a much larger force of the enemy is about to leave Halifax. It sails thence May 25th, blockades Portland, occupies Casco bay, and gains touch with its Provincetown fleet, May 27th. Is composed of ten battleships, fifteen armored cruisers, twenty cruisers, twenty gunboats, twenty torpedo boats, and fifty transports, carrying 20,000 troops of all arms.

Each member of the class had to solve his problem—no easy task, as the given force of the enemy was greater than that of the defence. Months were allowed for study and lectures bearing on "Strategy," "Tactics," and "Coast Defences" were given to aid the students.

THE WAR GAMES.

War games are also played by the students, and these form the most interesting features of the work. There are three games in all, the "Duel," "Tactics," and "Strategy."

In the "Duel" the object is to teach the skilful handling of a ship in the presence of an adversary. There are two players, each of whom is supposed to be in command of a rival ship. The type of the



CAPTAIN TAYLOR.

ships is settled by mutual consent. An umpire supervises the game, his decisions being final.

Let us suppose, for example, that an enemy's vessel of the Iowa type is approaching an American vessel of the New York type. The position of these vessels, when they first sight each other, is indicated on the map. Now, it is obvious that upon the quickness of each commander to take advantage of all the possibilities of his boat and of all the weaknesses of his rival victory will depend. From minute to minute every turn or movement may expose your weakness or develop your strength. So each player is furnished with a rule, or, rather, a pasteboard form, which enables him to indicate with pencil the evolutions of his ship either in a straight line or in a curve, from minute to minute. Each minute comprises one move. Such guns are held to have been fired as in each type of ship might have been brought to bear upon the other during each move. The relative value of such gun-fire is determined according to a carefully prepared table, and that ship wins which can be shown to have done the greatest execution upon the other at successive moves.

The table shows the angles at which a gun can fire, and how often and how rapidly each gun can be utilized, the comparisons being based upon actual target practice.

The next game, called "Tactics," represents a fight between two fleets. The game is played upon a tactical board. This is a plain piece of board about ten feet long and eight feet wide, perforated with an infinite number of pin-holes. The locality of the supposed fight is selected, and bits of pasteboard representing the shoals, the islands, and the neighboring coast are fastened upon the board, which is thus transformed into a map. The rival ships are then arranged as per a written description. Pieces of lead three quarters of an inch long represent these ships. They have pins on their bottoms, which are placed in the pin-holes, so that the ships may be moved on the board from pin-hole to pin-hole.

The fight begins from the moment the fleets are in sight of one another. There are two players and an umpire, as in the preceding game. Each proceeds according to rule until a certain limited number of moves are made or until the final decision of the umpire puts an end to the game. Each move represents the distance the fleet would make in two and a half minutes, and each player is given one minute from the end of the move to announce the next.

The object of the game is so to dispose of your ships with respect to one another to the enemy, to friendly or unfriendly fortifications, to shoals or passages, as to augment their offensive power. You understand, of course, that each fleet moves simultaneously as it would in actual warfare, and that the net value of the relative positions which each ship assumes after each move determines the final issue of the battle.

THE HARDEST GAME.

We now come to the most complicated and important of all the games—"Strategy." This represents not a single fight, but a complete campaign of two rival armaments. The entire class of students is divided into four, each sub-division being called a committee. Two of the committee, or one half of the class, look on as spectators. Each of the two takes a fleet under his charge. There is one commander-in-chief for each side, and as many commanders of detachments as necessary, who receive orders from the commander-in-chief, but have the same liberty of action when acting alone as they would have in actual service.

The game is started by the presentation of the conditions, which are supposed. Here is one game, as an example:

WAR-GAME—STRATEGIC SITUATION.

War exists between the Red, Great Britain, and the Blue, United States. A Red force for three battleships, three armored cruisers, six protected cruisers, and six gunboats, are making Delaware bay its temporary headquarters. Two detachments of the Blue are near by—one in Chesapeake bay, of two battleships, two armored cruisers, [illegible] protected cruisers, and four gunboats; the other in Nantucket sound, and of the same strength.

At — A. M., October 2d (the time being unknown to the Blue), the commander-in-chief of the Red learns that the Blue Chesapeake detachment sailed at midnight, with the intention of joining the Nantucket detachment. The object of the Red is to prevent this junction of the Blue without becoming engaged by a superior force. If successful in doing so, the Red wins; otherwise, the Blue wins.

Limit of time—Four days from midnight of October 1st.

Limit of play—North of latitude 37, west of longitude 68.

Daylight, 6 A. M. to 6 P. M. Weather fine.

Initial points of measurement:

Nantucket—Great Point Light-house.

Chesapeake Bay—Cape Charles Light-ship.

Delaware Bay—Five Fathom Bank Light-ship.

The Third Committee will take the Red.

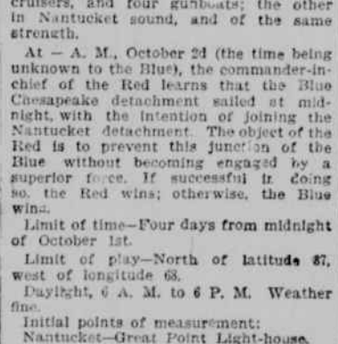
The Fourth Committee will take the Blue.

After this situation has been thoroughly understood the two rival committees separate into different rooms. Each commander-in-chief issues his general orders to his officers. When they detail a separation of some of the ships from the main fleet the officers representing those ships must go into a room by themselves, where one ship is separated from its companions that one officer must seclude himself in a single room.

Thus a complicated game may, before the end, require as many rooms as there are players. Each officer or group of officers, each room, in short, has to work out its own problem, unaided exactly as a ship would have to do on the ocean. It describes its movements on a chart. All the movements of all the vessels are reported as soon as made to an arbitrator in a separate room by himself, who keeps a record of the entire situation. As soon as any ships belonging to separate rooms come in sight of one another those rooms are notified, and action is taken accordingly.

Of course, if two British ships fall in with one American of the same class, the American is supposed to be gobbled up. And so it every meeting an overwhelming preponderance of force on one side or the other will decide against the weaker. The game continues until one side is annihilated by the other, or either side wins by gaining the objective, with or without bloodshed.

It can be seen from this that the United States are not in the deplorably unprepared condition which the foreign countries seem to imagine them.



(se 1-Su,W&F-tf)

BOOK AND JOB PRINTING NEATLY EXECUTED AT THE DISPATCH PRINTING-HOUSE.

FROM HERE TO CHINA.

Interesting Account of a Trip from Richmond to Hongkong.

THE BEAUTIES OF HONOLULU.

Much Like an American City Except for Its Tropical Appearance—How a Sabbath Is Lost in Travel—Home of the Japanese.

In the letter that follows, Rev. R. E. Chambers, who, with his wife and several other missionaries, sent out by the Foreign Mission Board of the Southern Baptist Convention, left a few weeks ago for their field of labor, in China, gives an interesting account of their trip from Richmond to Hongkong, at which place they arrived November 20th:

A trip from Richmond, Va., to Canton, China, furnishes a traveller so many new experiences that he scarcely knows what to mention in a description of it. There is, first, the journey across the United States, and one has no idea how great that country is until he has spent between five and six days crossing it. Then comes the voyage across the broad Pacific, which takes from twelve to fourteen days, when the ship goes directly from San Francisco to Yokohama, Japan, or from three to four days additional if she goes via the Hawaiian Islands. The ship usually calls at two or three points in Japan, and often at Shanghai, before coming to Kongkong. Passengers for Canton have to come from Hongkong on one of the river-steamers, so it is usually about a month after the ship leaves San Francisco before the passenger for Canton finds himself at his destination.

The route from Richmond was over the Chesapeake and Ohio railway and connecting lines. The writer takes pleasure in saying that he found the agents of this company and the employees on its trains always courteous, and glad to do anything they could for the comfort and convenience of the travellers. Their service is first-class, and their road goes through some of the most beautiful scenery in the United States. Glimpses of the Piedmont and Shenandoah valleys are charming, indeed; and the world-famed "Blue-Grass Region" of Kentucky delights the eyes of the traveller as the train whirls him along at the rate of forty miles an hour.

LIVE AMERICAN CITY.

Two days were spent in St. Louis. This is one of the cities of which the United States has just cause to be proud. Excellent street-car service, magnificent buildings, wide streets, beautiful parks, and the largest, most costly, and best-equipped depot in the world, are among its many attractions. St. Louis, in the strongest American sense, is a live city. Only about two hours were spent in Kansas City, but a street-car ride, which consumed most of that time, was sufficient to give the writer a very vivid impression of the wonderful city which the energetic westerners have built on their precipitous hills. The cable has enabled them to construct rapid and efficient street-car lines over hills, many of which would otherwise be impassible. A resident of the city, seeing that I was a stranger, took great pleasure in pointing the places of special interest. His kindness was one of the many things which serve to give me a most delightful memory of my journey through the West. In Denver, Cheyenne, Salt Lake City, and, in fact, in every western city in which it was my privilege to stop, I met with refined, courteous treatment, and found the "rough westerner" to be only a myth of the easterner's conceited imagination.

The route from Kansas City to Denver was over the Union Pacific railroad, and was through some beautiful prarie country, which stretches away as far as the eye can see, and for the most part is in a high state of cultivation. Farms of a thousand and more acres are not rarities in that region. Denver must be a surprise to every visitor from the East. This city, which less than forty years ago was a mining camp, is now a great metropolis. A drive through its beautiful parks and its magnificent boulevards, which are lined with residences, and bordered with beautiful shade-trees, was one of the delights of a few hours' stay in this city. Every one knows what a delightful climate the residents of Denver enjoy. Many surprising stories are told of the cures which the pure mountain air has wrought.

THE GREAT MORMON TEMPLE.

A ride of twenty-four hours brought our party to Salt Lake City. Immediately after reaching there we took a carriage and were driven to the Mormon tabernacle. This building has seats for 9,000, and has held 11,000. Its acoustics are perfect. One can literally hear a pin drop when about three hundred feet from it. The experiment was tried for the especial benefit of our party. In this building are held the preaching services of the Mormon Church. The temple, which is a very imposing and costly building, is used only for especially sacred services. No Gentiles are allowed to enter it. The cost of this temple was between four and five million dollars, and it was forty years building.

Brigham Young's residences, schoolhouse for his children, and his private graveyard are among the points of interest to which one's attention is called. It is wonderful to see what has been done with this once desert valley, Salt Lake City is a veritable garden. Its streets are 132 feet wide, bordered with shade trees, and laid out at right angles. Along each side of many of the streets is a clear, cold stream of water, from the mountain canyons, which, with the numerous shade-trees, fruit-orchards, and gardens surrounding every residence, give the city an indescribable air of coolness. The city has many fine business-blocks, hotels, churches of various denominations, and a very large and beautiful City Hall, very much like the one in Richmond.

The trip from Salt Lake City to San Francisco occupied about thirty hours, and for twelve hours after leaving the region of Salt Lake City the route was through a country as barren and unattractive as any could be. Only around the little railway-stations was there any sign of life. It was a great relief to get into the Sacramento Valley, which is of unusual fertility, and "a thing of beauty forever." There they have no winter, and the flowers bloom all the year.

Our steamer left very soon after we reached San Francisco, and we got only a few glimpses of the City of the "Golden Gate." We were impressed with its hills, its activity, its flowers, its magnificent business-blocks and hotels, the mixed character of its population, and the uniform politeness and kindness of its people.

IMPRESSIONS OF HONOLULU.

We will pass over the week between our departure from San Francisco and our arrival at Honolulu (for reasons which the reader may surmise), and tell something of what we saw in this island city. The harbor here, though small, is safe in all weather, and is deep enough to admit the largest ships. The surrounding scenery is very pretty, and was especially so to us, who for six days had seen only the restless, rolling ocean. We were not long in once more entrusting ourselves to the kind care of old Mother Earth. We realized as soon as we had landed that we were within the tropics. Palms and ferns of every description abounded, and the wide streets, bordered with luxuriant, tropical trees, on either side of which were residences with their broad verandas, shaded with vines, and embowered in flowers of every hue, presented a scene of rare beauty, and one never to be forgotten. A recent visitor thus expresses his feelings on arriving: "The scene before me is more like a beautiful conservatory than anything else—so rich is it in all kinds of tropical plants and trees. Among them are trees laden with delicious fruits, and plants and shrubs that are clothed in perpetual bloom. There are stately, royal palms, whose trunks are as smooth and round as if they had been turned on a lathe. Among its flowers are magnificent oleanders, fuschias, geraneums, and morning glories, which for size and luxuriance eclipse anything in the United States." But for these tropical scenes I could have thought that I was in a live American city. English is spoken by everybody; here are neatly uniformed policemen, there is a first-class fire-engine-house, and school-houses, and churches are to be seen in every section of the city. In the business part of the city are many large stores, built of brick or stone. Hacks can be found at almost every corner, and tram-cars will convey you to any part of the city for 5 cents. It was with real regret that we left Honolulu, "Fairhaven" (for that is what the Hawaiian name means). It will always be a pleasure to fancy ourselves again—

"Where laughing waters through deep jungles flow;
And swift-winged birds go flitting to and fro';
Delicious odors fill the passing breeze;
And, sounding faint and far,
The muffled music on the coral bar;
The loud-voiced chant of ever restless seas."

THE SABBATH CUT SHORT.

Though we were ten days coming from Honolulu to Yokohama, we had only about an hour and a half of Sunday, for when we reached the 180th meridian on that day, at about 1:30 A. M., the balance of it was dropped, and the ship's calendar was moved forward twenty-four hours. Our ship stopped only a short time at Yokohama, and we were able to get only a glimpse of the "Land of the Sunrise" and its diminutive inhabitants. We spent a few hours roaming around Yokohama, and then boarded the train for the capital city, where we had a most delightful Jinriksha ride of about two hours. The Jinriksha (man-pull-carriage) is the hack and street-car of Japan. It is not much larger than a baby-carriage; and, by the way, it was that vehicle which suggested it to the American missionary, Mr. Jonathan Goble, to whom the Japanese are indebted for this most delightful and now almost universal method of travel. It has only two wheels, carries only one passenger, and is drawn by one man. It is wonderful to see the endurance of these wiry little coolies, who can easily pull you along at the rate of from four to six miles an hour, and seemingly never grow weary. To the American almost everything in Japan is small. You can scarcely get into their little shops. Their farms are often not more than a quarter of an acre, and frequently have a flower-garden, in which there are walks, a fountain, a running stream, and a number of beautiful trees, all occupying only a few square yards.

IS A CHARMING COUNTRY.

But the visitor cannot [illegible] being charmed with Japan. The ride from Yokohama to Tokio furnishes [illegible] continual panorama of beauty. The country is in a high state of cultivation, and the rice plantations (better called gardens), pear orchards, banana- and orange-groves, and truck-gardens, all beautifully kept, were constant sources of attraction to us, as the little train carried us along at the rate of about twenty miles an hour. Much of the little I saw of Tokio (it is said to cover a greater area than any other city in the world) during the three hours I was there was on a much grander scale than anything I had previously seen in Japan. Many of the government buildings will compare favorably with any in America, and some of them are really architectural gems. Many of the streets in the capital city are magnificent boulevards, and the palace-grounds are a beautiful, picturesque, and capacious park. I was especially struck with the cleanliness of the Japanese. Their little shops, their snug homes, their railway coaches, as well as their clothing, were always neat and clean. I was informed by a missionary, who has resided there for a number of years and travelled in the interior, that this is true of Japan as a whole, and that even the lower classes are much more cleanly than the corresponding classes in the United States.

CHINA, A FAST STEAMER.

Leaving Yokahoma in the afternoon, the evening of the second day found us anchored in the small but pretty mountain-locked harbor of Nagasaki. Here the ship took on a new supply of coal, which is mined near-by, and it was very interesting to watch the natives, both men and women, as, formed in lines, they rapidly passed the baskets of coal from one to the other.

The sail from Nagasaki to Hongkong was thoroughly delightful, and we were sorry to say, "Good-by" to the old ship when we reached Hongkong.

Our ship, the China, is one of the fastest on the Pacific. She can easily make seventeen knots an hour, which is something over 400 miles a day. On this voyage, however, her average speed was about 350 knots a day. She consumes about ninety tons of coal a day; is 365 feet long (nearly a square and a half), 40 feet wide, and draws from 22 to 27 feet of water. Her crew numbers 168, including officers. The sailors are mostly Chinese, and I was told that they are especially good seamen.

Our ship was a little world; almost every class was represented on it. The officers were all Americans, the servants Japanese and Chinese, the steward a Cuban, and among the cabin passengers were four Russians, two Frenchmen, one German lady, a half-dozen Englishmen, and an equal number of "Yankees," five actresses, five Japanese, a Chinese Mandarin, with his wife and little 4-year-old boy. There were also the irrepressible commercial-traveller, the omnipresent reporter, the funny man, and the Rude two Baptist preachers, who were on a trip around the world, and eighteen missionaries. Besides these there were 134 Japanese and 770 Chinese steerage-passengers.

LAID IN LIBERAL SUPPLIES.

The purser informed me that it took 1,200 pounds of rice, 1,000 pounds of vegetables, and 1,000 pounds of meat per day for the steerage passengers alone. Three Chinese died on the voyage; their bodies were embalmed and brought to China, to be buried, as the Chinese believe that terrible calamities will befall the departed spirit if the body does not repose in the "Flowery Kingdom." It is astonishing to see how much freight can be stored away in one of these vessels. The China can carry 5,000 tons, besides having cabin-room for 100 first-class passengers, and an indefinite number of steerage passengers. Water is condensed, and ice is made on board, and she has a complete electric-plant. It cost to build and fully equip her nearly a million dollars. I see that my letter is assuming alarming proportions, so I must close.

As soon as we reached Hongkong, amid the yelling of hundreds of Chinese coolies we got our baggage off the ship and were soon aboard the Canton steamer. The next morning found us lying at anchor in West river, and soon we were ashore, and at our journey's end. As I write this I see from my window many strange and curious sights, about some of which I may tell the readers of the Dispatch in a future letter. For the present I will say "Man, man, hang."

R. E. CHAMBERS.

Athletes

don't get their almost superhuman strength by resting, but by continual exercise. Tie up your arm and see how quickly it will lose its strength. Diet—rest your stomach and see how soon it becomes impossible to digest the lightest food.

Dr. Deane's Dyspepsia Pills.

Eat good nourishing food, and take Dr. Deane's Dyspepsia Pills, and see how quickly your stomach becomes willing and anxious to do its part. White wrapper if constipated, yellow if bowels are loose. Sample mailed free.

DR. J. A. DEANE CO., Kingston, N. Y.

(de 22-Su,Tu&Th-&wly)fr)